

Claims

- [c1] 1. A process for fabricating bumps, comprising the steps of:
- providing a wafer having a plurality of bonding pads and a passivation layer thereon, wherein the passivation layer is disposed on a surface of the wafer and exposes the bonding pads;
- forming a photoresist layer over the wafer, wherein the photoresist layer has a plurality of openings with different widths and the openings are positioned corresponding to the bonding pads;
- immersing the wafer into an electrolytic solution; and
- performing an electroplating operation by providing an increasing step current to the electrolytic solution.
- [c2] 2. The bump fabrication process of claim 1, wherein the increasing step current is set between I_{\min} and I_{\max} , wherein I_{\min} is a smallest current to start the electroplating operation and I_{\max} is a largest permissible current for performing the electroplating operation.
- [c3] 3. The bump fabrication process of claim 1, wherein the step current comprises a plurality of linear currents.

- [c4] 4. The bump fabrication process of claim 3, wherein the step of performing an electroplating operation further comprises stopping providing the step current for a brief period, so that the electroplating operation is temporarily suspended.
- [c5] 5. The bump fabrication process of claim 1, wherein the step current comprises a plurality of pulse currents, each having a peak current and a trough current.
- [c6] 6. The bump fabrication process of claim 5, wherein the peak current is set between I_{\min} and I_{\max} .
- [c7] 7. The bump fabrication process of claim 5, wherein the trough current is selected from the group consisting of a positive current smaller than I_{\min} , a zero current and a negative current.
- [c8] 8. The bump fabrication process of claim 1, wherein the step current comprises at least a pulse current and a plurality of linear currents and the pulse current comprises a peak current and a trough current.
- [c9] 9. The bump fabrication process of claim 8, wherein the peak current is set between I_{\min} and I_{\max} .
- [c10] 10. The bump fabrication process of claim 8, wherein the trough current is selected from the group consisting of a

positive current smaller than I_{\min} , a zero current and a negative current.